REMARKS

Claims 1-12, 14-20, 22-26, 35-38, 44-47 and 51-52 are pending in the present application. By this reply, new claim 52 has been added. Claim 44 independent.

The existing claims have been amended to correct minor informalities and to clarify the invention according to U.S. patent practice. New claim 52 has been added. These modifications do not add new matter and are fully supported by the original disclosure. For instance, the present invention is directed to 'data broadcasting' which is a term well known in the art to have established meanings and characteristics, which do not involve ad-avail matching. Also, for support, see for example Figs. 14, 25-27, 32, and 39-40 and the corresponding discussion in the specification; page 14, line 3 to the end of page 14 of the specification; page 15, line 21 to the end of page 15 of the specification, etc.

CLAIM OBJECTION

Claims 36 and 38 have been objected to because of minor informalities. These claims have been amended according to the Examiner's suggestions. Thus this objection should be withdrawn.

35 U.S.C. §103 REJECTION

Claims 1-12, 14-20, 22-26, 35-38, 44-47, and 51 are rejected under 35 U.S.C. §103(a) as being unpatentable over Eldering et al. (U.S Patent No. 6,820,277) in view of Zigmond et al. (U.S Patent No. 6,698,020). This rejection, insofar as it pertains to the presently pending claims, is respectfully traversed.

Firstly, Applicants' invention is directed to 'data broadcasting' which is a term well known to one skilled in the broadcasting industry to have established meanings and characteristics, which do. not involve ad-avail matching operations. The field of data broadcasting to which Applicants' invention pertains, is a domain that is vastly different from the domain of ad-avail matching systems of Eldering et al. and Zigmond et al. These domains require vastly different technologies, characteristics and business models. Further, the architectures and techniques applied in Applicants' invention are irrelevant to those applied to the ad-avail matching systems of Eldering et al. and Zigmond et al.

In view of these differences, without acquiescing to any of the Examiner's allegations made in rejecting the claims, but to advance prosecution only, independent claim 44 has now been amended to more clearly emphasize these distinguishing features of the present invention over the applied references. For instance, claim 44 now recites a *data broadcasting* system, and not an ad-avail matching system like Eldering et al. and Zigmond et al. Claim 44 also recites that the data broadcasting system is for delivering "arbitrary files and streams of communication protocol packet" and comprises "at least one content provider unit to identify *the arbitrary files and streams of communication protocol packets to be delivered in the data broadcasting system*" (emphasis added).

Secondly, claim 44 further recites "wherein the content liaison unit pre-allocates each bandwidth profile without imposing restrictions on times at which the transmission of individual files or communication protocol packets start and end, other than a restriction that a total bit rate used by all files and communication protocol packets being transmitted at any given time is not to exceed the bit rate available at that time under the corresponding pre-allocated bandwidth profile" (emphasis added). In other words, Applicants' data broadcasting system provides a scheduling process, which is far more flexible in terms of when the transmission of a file or protocol packet can start and end (and therefore far more complicated from a timing and bandwidth management point of view) than just matching discrete ads to discrete ad slots in TV programs as in Eldering and Zigmond.

Thirdly, claim 44 also recites "wherein each bandwidth profile is in the form of a specification of a bit rate available in the broadcast or multicast medium as a function of time, with no reference to data types, data formats, or other properties of the digital content of the files that can be transmitted within the corresponding bandwidth profile at any particular time" (emphasis added). In Applicants' data broadcasting system, the bandwidth allocations and scheduling instructions in data broadcasting make no reference to any data type, data format or other property of the data being delivered/fed in. All these features are clearly absent from the ad-avail matching systems of Eldering and Zigmond, either taken singularly or in combination.

Fourthly, in contrast to the ad-avail matching systems of Eldering et al. and Zigmond et al., according to Applicants' invention, in an application domain involving a distribution of data via a broadcast or multicast medium such as a digital TV or satellite signal, the ability of each content provider to receive a pre-allocated bandwidth profile from a content liaison device in

advance, to determine the timing of content distribution as desired by the content provide within the allocated bandwidth profile, and to make his/her own timing trade-offs among different content items he/she wants to distribute, is one of many important and advantageous aspects of the invention. This is a reason why the present invention gives the content provider maximum freedom to make these decisions, within the context of a bandwidth allocation given to them by the broadcaster, rather than having some kind of automated system trade off the needs of different content providers against each other and make automated scheduling decisions.

Fifthly, in Eldering et al., the AMS (Ad Management System) matches the avails (pre-allocated advertisement slots) with appropriate advertisements by using complex computations based on a variety of factors in order to provide targeted advertisement. As acknowledged by the Examiner, in Eldering et al., the AMS (and not the content providers such as advertisers) determines a time at which each advertisement is to be inserted into one of the set advertisement slots. This is one of the advantageous features of Eldering's system. On the other hand, Zigmond et al. is concerned with selecting and inserting advertisements into a video programming feed at a household (end user) level based on ad selection criteria provided by an advertiser. As shown in Figs. 3 and 4, Zigmond et al.'s ad insertion device at the end user's house inserts a particular advertisement into an advertisement slot in lieu of an advertisement already inserted at the broadcaster's side, based on the ad selection criteria provided by the advertiser.

However, it does not make sense and is clearly non-obvious to modify Eldering's system with such teachings of Zigmond, which would result in the Eldering's advertisers to completely dictate how ads are matched the avails. If the Eldering's AMS were modified as suggested by the Examiner (which is not obvious), then all other characteristics that are actually provided by the advertisers of Eldering. would be irrelevant, whereby there would be nothing for the AMS of Eldering to do. There would be no point in computing correlations as is done in Eldering et al. The ad could only be assigned to the specified advertisement avail. The whole point of the AMS in Eldering et al. is to take (1) a large collection of ads with demographic characteristics of the target audience and (2) a large collection of advertisement avails with demographic characteristics of the expected audience that will be tuned to the advertisement avail, and then use computer-calculated correlations between the characteristics of the ads and advertisement avails to facilitate the assignments of ads to advertisement avails. Further, this is one of the

many reasons why Eldering et al. does not in any way teach or suggest the inclusion of the insertion schedule among the input parameters provided by an advertiser. That is, Eldering et al. teaches away from making the modifications to its AMS as suggest by the Examiner in view of Zigmond et al. because such modifications would render moot and/or destroy the ad-avail correlation computation operations of the AMS. It is basic patent law that a combination is improper where one of the references teaches away from combining it with the other. *Tec Air. v. Denso*, 192 F.3d 1353, 1360 (Fed. Cir. 1999). Thus such modification is not obvious and a *prima facie* case of obviousness has not been established.

Sixthly, even if Eldering's system were modified in view of Zigmond, assuming *arguendo* only (modification is clearly NOT obvious), the modified system would not render the claimed invention obvious because Applicants' claimed invention is directed to 'data broadcasting' with all the specifically recited distinguishing features associated with the data broadcasting, which has nothing to do with the ad-avail matching operations of the prior art including Eldering and Zigmond.

For all these reasons, independent claim 44 and its dependent claims (due to the dependency) are clearly patentable over the applied references, and the rejection is improper and should be withdrawn.

CONCLUSION

For the foregoing reasons and in view of the above clarifying amendments, Applicants respectfully request the Examiner to reconsider and withdraw all of the objections and rejections of record, and earnestly solicits an early issuance of a Notice of Allowance.
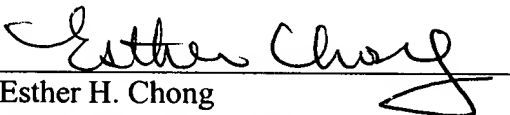
Should there be any outstanding matters which need to be resolved in the present application, the Examiner is respectfully requested to contact Esther H. Chong (Registration No. 40,953) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Dated: May 24, 2007   Respectfully submitted,

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